

Material Safety Data Sheet

According to 91/155 EC

Printing date 13.10.2003

Reviewed on 13.10.2003

1 Identification of substance:

· **Product details:**

· **Trade name:** *Poly-F Plus*

· **Application of the substance / the preparation** *Zinc polycarboxylate cement*

· **Manufacturer/Supplier:**

DENTSPLY DeTrey GmbH

De-Trey-Str. 1

D-78467 Konstanz

GERMANY

Tel.:

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+49-7531-583-104

· **Further information obtainable from:**

- *Departement Analytical Research / Research & Development for* *technical information*

- *Departement Marketing & Sales for distribution of the safety data* *sheets*

· **Information in case of emergency:** *+49-7531-583-0*

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

<i>CAS: 1314-13-2</i> <i>EINECS: 215-222-5</i>	<i>zinc oxide</i>	<i>N; R 50/53</i>	<i>50-100%</i>
<i>CAS: 9003-01-4</i>	<i>Polyacrylsäure</i>	<i>Xi; R 36/38</i>	<i>10-25%</i>
<i>CAS: 1309-48-4</i> <i>EINECS: 215-171-9</i>	<i>magnesium oxide</i>		<i>2.5-10%</i>
<i>CAS: 7783-47-3</i> <i>EINECS: 231-999-3</i>	<i>tin difluoride</i>	<i>Xn; R 22</i>	<i>2.5-10%</i>

· **Additional information** *For the wording of the listed risk phrases refer to section 16.*

3 Hazard identification

· **Hazard description:**

N Dangerous for the environment

· **Information concerning to particular hazards to man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Classification system**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First aid measures

· **After inhalation** *Supply fresh air; consult doctor in case of complaints.*

· **After skin contact** *Immediately wash with water and soap and rinse thoroughly.*

· **After eye contact** *Rinse opened eye for several minutes under running water. Then consult a doctor.*

· **After swallowing**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

5 Fire fighting measures

· **Suitable extinguishing agents**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 2)

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(Contd. of page 1)

- **Special hazards caused by the substance, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** Wear self-contained respiratory protective device

6 Accidental release measures

- **Person-related safety precautions:** Avoid formation of dust.
- **Measures for environmental protection:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:** Pick up mechanically.

7 Handling and storage

- **Handling** Product is intended for dental use only.
- **Information for safe handling:**
Observe normal care for working with chemicals.
Prevent formation of dust.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

1314-13-2 zinc oxide

OEL	Short-term value: 10 mg/m ³
	Long-term value: 5 mg/m ³

1309-48-4 magnesium oxide

OEL	10 mg/m ³
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- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 3)

Material Safety Data Sheet

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(Contd. of page 2)

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· General Information

Form:	Powder
Colour:	Yellowish
Odour:	Odourless

· Change in condition

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined

· Solubility in / Miscibility with

Water: Partly soluble

· **pH-value:** 3.2-4.5 (10% in water)

· Solvent content:

Organic solvents: 0.0 %

· **Solids content:** 100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.

12 Ecological information:

- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **General notes:**
*Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms*

(Contd. on page 4)

Material Safety Data Sheet

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Trade name: Poly-F Plus

(Contd. of page 3)

13 Disposal considerations

- **Product:**
- **Recommendation**



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 9 (M7) Miscellaneous dangerous substances and articles.
- **Danger code (Kemler):** 90
- **UN-Number:** 3077
- **Packaging group:** III
- **Hazard label** 9

- **Maritime transport IMDG:**



- **IMDG Class:** 9
- **UN Number:** 3077
- **Label** 9
- **Packaging group:** III
- **EMS Number:** F-A,S-F
- **Marine pollutant:** Yes
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3077
- **Label** 9
- **Packaging group:** III
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)

15 Regulations

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

(Contd. on page 5)

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(Contd. of page 4)

· Code letter and hazard designation of product:*N Dangerous for the environment***· Risk phrases:***50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.***· Safety phrases:***22 Do not breathe dust.**25 Avoid contact with eyes.**26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.**28 After contact with skin, wash immediately with plenty of water.**57 Use appropriate container to avoid environmental contamination.**60 This material and its container must be disposed of as hazardous waste.***· National regulations****· Waterhazard class:** *Water hazard class 2 (Self-assessment): hazardous for water.***16 Other information:**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant R-phrases*22 Harmful if swallowed.**36/38 Irritating to eyes and skin.**50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.***· Department issuing MSDS:** *Analytical Research***· Contact:** *HotLine for urgent technical support: +49-7531-583-333*

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